

Determining the effectiveness of a family nutrition education teacher training curriculum in  
building knowledge and self-efficacy of program staff

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## Table of Contents

Abstract.....	3
Background.....	4
Objective.....	5
Hypothesis.....	5
Methods.....	5
Results.....	9
Discussion.....	11
Acknowledgements.....	16
References .....	17
Appendices.....	18

### **Abstract**

Simple Suppers (SS) is a multi-component, 10-lesson nutrition education and food preparation program tailored to low-income families. SS is designed specifically to improve family mealtime routines as a way to increase child diet quality. Program components include: nutrition education; food preparation; and group meal. SS previously underwent multiple iterations of pilot testing for feasibility and will be tested for efficacy in an upcoming randomized controlled trial (RCT) in a faith-based community center. A SS teacher-training curriculum (SS-TTC) was developed in tandem with the main SS curriculum and is aimed at building program-related knowledge and self-efficacy (SE) of SS staff. The objective of the current study was to determine the effectiveness of SS-TTC in building program-related knowledge and SE. SS staff received one day of intensive teacher training prior to program delivery that was tailored to his or her specific role in SS, parent educator (n=6), data collection (n=22) or child educator (n=20). SS staff were asked to complete a role-specific (parent educator, data collection or child educator) survey evaluating: 1) post-training program knowledge (multiple-choice questions); and 2) pre- to post-training program SE (4-point Likert scale, 'not at all confident' to 'very confident'). The mean score (%) for program-related knowledge was approximately 80% for both parent educator staff and data collection staff. The mean score (%) for program-related knowledge for the child educator staff was approximately 93%. SE increased significantly among the parent educator ( $p=0.03$ ), data collection ( $p<0.001$ ) and child educator ( $p<0.001$ ) staff. Participation in SS-TTC led to an achievement of program-related knowledge and SE. Results from this study provide information that may enhance this and other similar nutrition teacher training programs.

## Background

While it is widely accepted that educator training – that which provides the necessary background nutrition knowledge and education in the program curriculum – is required for nutrition educators to effectively teach and engage program participants, few studies have been directed at determining the effectiveness of teacher training programs on staff preparedness.<sup>1</sup> It is imperative for training programs to give educators the opportunity to gain and maintain knowledge, confidence and the necessary skills to teach.<sup>2</sup> Results from studies indicate that educator training should not only focus on teaching general and program-specific nutrition information, but also developing self-efficacy of educators due to its impact on participant achievement, motivation, and self-efficacy.<sup>3</sup> Educator self-efficacy has also been found to increase a variety of outcomes in the teachers themselves, including persistence, commitment, instructional behavior and enthusiasm<sup>3</sup>. Self-efficacy can be defined as “the conviction that one can successfully execute the behaviors necessary to produce the outcomes.”<sup>2</sup> It has two components, one being efficacy expectation and the other, outcome expectation. Efficacy expectation is the belief that one can achieve a chosen behavior and outcome expectation is the belief that the behavior will lead to the expected outcome.<sup>2</sup> Strategies for increasing self-efficacy include: vicarious learning, mastery, and verbal persuasion.<sup>2</sup> This conviction, or judgment of one-self, can be very influential, both for the teacher as well as the students.<sup>3</sup> Teachers with established, strong self-efficacy have been found to be more organized and prepared for lessons, as well as be more adaptable to students needs and show higher levels of enthusiasm.<sup>3</sup> With specific regard to nutrition educator training, preliminary data from focus groups indicate that face-to-face group training is an effective training method for increasing SE as it allows participants to interact with others, share ideas, and learn from other participants.<sup>4</sup>

## Objective

The objective of this study was to determine the effectiveness of the Simple Suppers Teacher Training Curriculum in building educator program-related knowledge and self-efficacy.

## Hypothesis

It was hypothesized that participants of the Simple Suppers Teacher Training Curriculum will gain and main the necessary skills, knowledge and self-efficacy to implement the Simple Suppers intervention effectively.

## Methods

*Simple Suppers:* Simple Suppers (SS) is a multi-component, 10-lesson nutrition education and food preparation program tailored to low-income families with at least one child aged 4-10 years old. SS is designed specifically to improve family mealtime routines as a way to increase child diet quality. Program components include: nutrition education; food preparation; and group meal. SS previously underwent multiple iterations of pilot-testing for feasibility and will be tested for efficacy in an upcoming randomized controlled trial (RCT) in a faith-based community center.<sup>5</sup> There are three separate staff roles in relation to the program: parent educators, data collection staff and child educators. Each set of staff had to be trained in his or her specific role in the SS intervention.

*Simple Suppers Teacher-Training Curriculum:* A teacher-training curriculum (SS-TTC) was developed in tandem with the main SS curriculum and is aimed at building program-related knowledge and self-efficacy of SS staff. Based on staff roles, SS-TTC includes three separate pieces – 1) parent educator staff (PES), 2) data collection staff (DCS) and 3) child educator

(CES). Each SS-TTC piece (PES, DCS and CES) is delivered by a small team of Simple Suppers research staff, occurs over a 2 hour period on a single day, and includes a variety of teaching and learning formats (formal lecture, group discussion, and 2-3 paired partner activities).

PES are trained to have an in depth understanding of the content and format of the 10 lesson SS curriculum, as well as grasp logistics in delivering the weekly program. For example, PES are trained in assisting participants to plan a well-balanced meal for the upcoming week. PES are trained in each of the 10 lesson topics, including, but not limited to: the importance of family meals, timesaving strategies for family meals, child appropriate food preparation skills, and eating well-balanced meals.

DCS are trained in proper data collection techniques for the nutrition and health outcomes of the SS intervention, including: child food preparation skills (9-item survey), child diet quality (24-hr dietary recall), and child BMI percentile (height and weight). DCS received a two-hour training where each participant had the opportunity to practice taking a waist circumference measurement on another participant according to NHANES waist circumference measurement protocol.<sup>6</sup> Other data collection methods taught and discussed during the training include anthropometrics such as height, weight and blood pressure, as well as how to administer a 24-hr dietary recall using the Multiple Pass Approach.

CES training occurred over a two-hour period on a single day and included formal lecture and group discussion of the Simple Suppers child curriculum. CES are trained in the content and format of the child curriculum, including the different child food preparation skills, one of the main nutrition and health outcomes being measured for SS. CES are also trained on the logistics of having the kitchen operate smoothly and effectively in relation to the food preparation

occurring during the child curriculum. Table 1. shows how the different curriculum components are categorized into strategies for developing self-efficacy.

**Table 1. Strategies for Developing Self-Efficacy**

	<b>Parent Educator Staff</b>	<b>Data Collection Staff</b>	<b>Child Educator Staff</b>
<b>Strategy</b>			
Vicarious Learning	<ul style="list-style-type: none"> <li>• Reviewing parent curriculum with partner</li> <li>• Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• 24-hr Dietary recall with partner</li> <li>• Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Reviewing child curriculum with partner</li> <li>• Group discussion</li> </ul>
Mastery	<ul style="list-style-type: none"> <li>• Discussing parent curriculum with partner/group</li> </ul>	<ul style="list-style-type: none"> <li>• 24-hr Dietary recall with partner</li> <li>• Finding iliac crest on partner</li> </ul>	<ul style="list-style-type: none"> <li>• Discussing child curriculum with partner/group</li> </ul>
Verbal Persuasion	<ul style="list-style-type: none"> <li>• Formal lecture</li> <li>• Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Formal lecture</li> <li>• Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Formal lecture</li> <li>• Group discussion</li> </ul>

Three separate questionnaires were developed to determine the effectiveness of the SS-TTC dependent on staff role. Each questionnaire comprised of program-related knowledge questions and self-efficacy statements. The breakdown of each questionnaire can be seen in Table 2. Program-related knowledge was measured post-test only due to the staff not being exposed to the curriculum prior to training. Program related-knowledge was scored for correctness. Multiple response questions were scored 1 point per correct answer and multiple choice questions were scored either correct or incorrect. The self-efficacy items were measured pre- to post-test and compared using paired t-test analysis. Self-efficacy statements were scored from 1 to 4 with 1 indicating a response of ‘not at all confident’ and 4 indicating a response of very confident’. Significance was determined by a p-value of  $p \leq 0.05$ .

**Table 2. Evaluation Plan**

<b>Staff Type</b>	<b>Subscales</b>	
	Program-Related Knowledge (single post-test)	Self-Efficacy <sup>3</sup> (pre- to post-test)
Parent Educator Staff (PES)	Multiple response (i.e., select all that apply out of 5) (5 questions)	4-point Likert scale, ‘not at all confident’ to ‘very confident’ (8 statements)
Data Collection Staff (DCS)	Multiple choice (6 questions)	4-point Likert scale, ‘not at all confident’ to ‘very confident’ (7 statements)
Child Educator Staff (CES)	Multiple choice (6 questions) and Multiple response (select all that apply out of 5) (1 question)	4-point Liket scale, ‘not at all confident’ to ‘very confident’ (8 statements)

All three questionnaires, Parent Educator Staff (Appendix A), Data Collection Staff (Appendix B) and Child Educator Staff (Appendix C), were modified from a validated questionnaire developed by Brenowitz and Tuttle (2003) and put under review for content validity.<sup>2</sup>

*Participant Recruitment:* Participants with a nutrition background (dietetic interns and nutrition undergraduate students) were recruited in person (e.g., classroom settings) and via email (individual and list serve). The participants comprised of Ohio State Department of Human Nutrition Dietetic Interns and Ohio State Undergraduate students, the majority either minoring or majoring in Human Nutrition. Some participants were recruited to participate in up to two sections of the SS-TTC, while others participating in only one component of the training.



## Results

Program related knowledge was measured post-test only and analyzed using percentages of the questions answered correctly. Table 3. shows the results for each survey item by questionnaire.

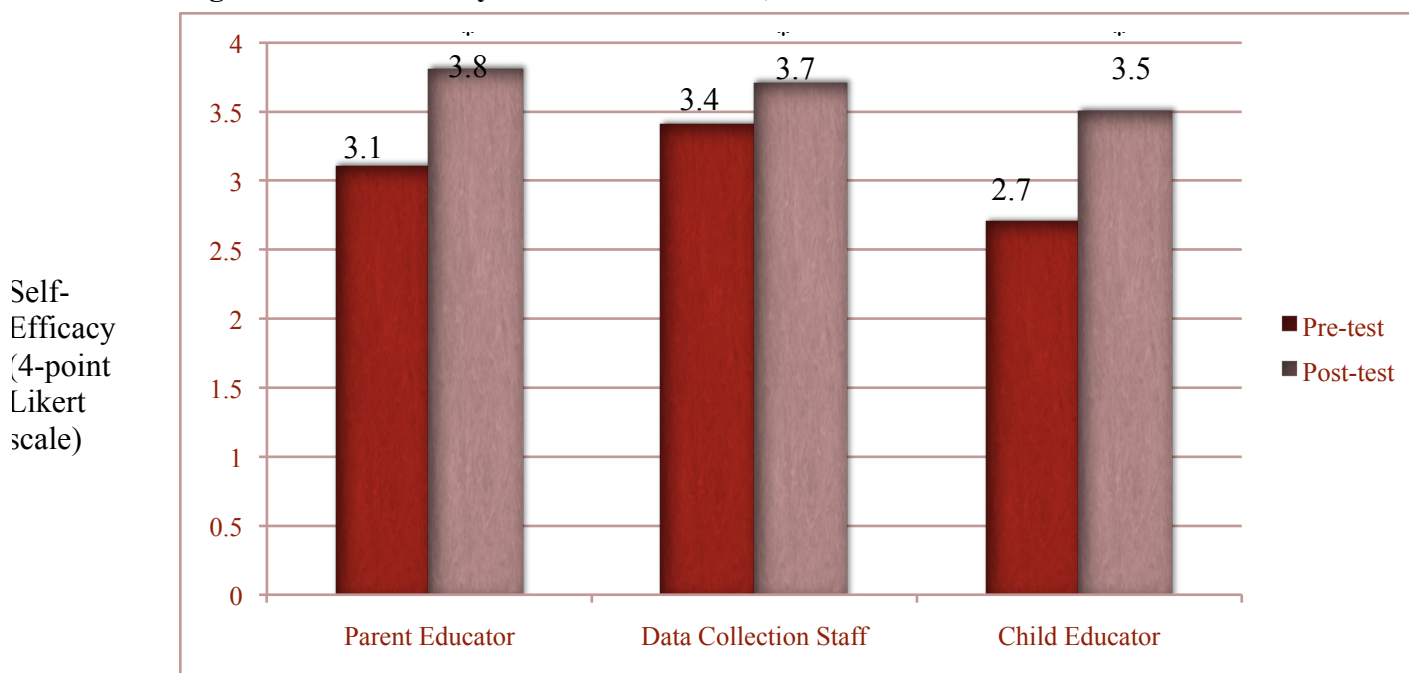
**Table 3. Survey Items Assessing Program-Related Knowledge of Parent Educator, Data Collection and Child Educator Staff and Scoring Results**

<b>Parent Educator Staff (PES) (n=6)</b>	<b>Correct n (%)</b>	<b>Incorrect n (%)</b>
Timesaving strategies for family meals*	6 (100)	0 (0)
Child appropriate food preparation skills*	6 (100)	0 (0)
Ways to serve/eat meals that are well-balanced and include healthy portions *	6 (100)	0 (0)
Strategies to eat healthy when eating away-from-home*	4 (67)	2 (33)
Strategies to plan healthy snacks*	5 (83)	1 (17)
	<b>Mean (SD)</b>	
<b>Total Score (up to 5 points per question X 5 questions = 25 points total)</b>	20 (2.1)	
<b>Percentage</b>	80%	
<b>Data Collection Staff (DCS) (n=22)</b>	<b>Correct n (%)</b>	<b>Incorrect n (%)</b>
Number of data collection points	10 (45)	12 (55)
Age of participating child	21 (95)	1 (5)
Determining factor for type of child food preparation skills administered	21 (95)	1 (5)
Individual who completes child questionnaires	20 (90)	2 (10)
Place in which food questionnaire is to be completed	15 (68)	7 (32)

Reference point for meal screener	19 (86)	3 (14)
	<b>Mean (SD)</b>	
<b>Total Score (1 point per question X 6 questions = 6 points total)</b>	4.8 (1.1)	
<b>Percentage</b>	80%	
<b>Child Educator Staff (CES) (n=20)</b>	<b>Correct n (%)</b>	<b>Incorrect n (%)</b>
Duration of child curriculum	18 (90)	2 (10)
Timing of child curriculum in relation to parent curriculum	18 (90)	2 (10)
Division of staff among child curriculum activities	17 (85)	3 (15)
Age-appropriate child food prep skills	19 (95)	1 (5)
Child Educator role throughout Simple Suppers	20 (100)	0 (0)
Food prep activities completed during child curriculum	19 (95)	1 (5)
Child food prep skills taught in child curriculum*	20 (100)	0 (0)
	<b>Mean (SD)</b>	
<b>Total Score (1 point per question x 7 questions = 7 points total)</b>	6.5 (0.76)	
<b>Percentage</b>	93%	

*\* $\geq 3$  out of 5 responses answered correctly for Multiple Response Questions; Multiple Choice questions were either correct or incorrect based on response.*

Self-efficacy was measured pre- and post-test for each component. Self-efficacy was analyzed using a paired t-test and significance was determined by  $p < 0.05$ . Figure 1. shows the mean self-efficacy score for Parent Educator Staff, Data Collection Staff and Child Educator Staff compared pre- and post test.

**Figure 1. Self-Efficacy of Parent Educator, Data Collection and Child Educator Staff**

\* $p < 0.05$  determined by paired t-test

### Discussion

The results show that participation in the SS-TTC led to achievement of program-specific knowledge and increased self-efficacy in Simple Suppers staff. These results can be used to enhance this and other nutrition educator training programs to maximize effectiveness of training curriculums in order to lead to more effective and efficient program implementation. It is important to note that some topics received higher scores on the questionnaires. This could be due to a variety of reasons, for example, certain topics being covered in greater detail, questionnaire wording or previous knowledge of participants on certain topics covered.

From the Parent Educator questionnaire, the topics of timesaving strategies for family meals, child appropriate food preparation skills and ways to serve/eat meals that are well-balanced and include healthy portions, were answered correctly by 100% of the participants

(n=6). This indicates that the participants may have understood those topics and questionnaire items better than the remaining two program-related knowledge questionnaire items. The item that was missed most frequently was the strategies to eat healthy when eating away-from-home, which was only answered correctly by 67% of SS-TTC- Parent Educator participants. This is a very important concept for Parent Educators to understand and be confident teaching, since the current food environment is heavily focused on eating away-from-home. These results show that the topic of eating healthy when eating away-from-home must be emphasized more during training and may require extra explanation. From these results, it may be necessary to re-teach these topics prior to implementation of the Simple Suppers curriculum. Although 83% of Parent Educators answered the item about planning healthy snack correctly, it was still the second most missed question. This indicates that it is important to reinforce this information in future trainings and prior to the lesson.

The Data Collection Staff had a mean score (SD) of 4.8 (1.1) out of 6 points for the program-related knowledge; meaning 80% of questions were answered correctly post-test. Even with an overall high percentage the majority of participants did not answer a few items correctly. The first program-related knowledge item, number of data collection points, was only answered correctly by 45% of participants. The item related to the location in which the food questionnaire should be completed was only answered correctly by 68%. These results indicate that future trainings should dedicate additional time in areas such as, how many data collection points occur throughout the Simple Suppers intervention and where questionnaires are administered. From the results, it would be beneficial to elaborate on the logistics, as well as specifics when conducting future SS-TTC. The remaining four items were answered correctly by  $\geq 86\%$  of participants indicating that these items were more easily understood. This could be due to a variety of reasons

including, but not limited to, previous knowledge experience, time spent on the topics or wording and format of the questionnaire items.

The Child Educator training had the highest overall percentage of answers correct with approximately 93% answered correctly. Every item on the program-related section of the questionnaire was answered correctly by at least 85% of participants. The lowest score was on the item related to the division of staff among child curriculum activities with 85% of CES participants responding correctly. As with the other two trainings, this is an area the trainers could improve on and make clearer throughout the training. A higher overall score could be attributed to the Child Educator Staff training occurring last. As the trainings continued, the trainers may have developed a better understanding of how to teach and fully engage a group of undergraduate college students.

Self-efficacy increased significantly from pre-test to post-test in each training component in the SS-TTC, as in seen in Figure 1. The mean score for the Parent Educator Staff pre-test questionnaire was 3.1 with a mean post-test score of 3.7, on a 4-point Likert scale, indicating that self-efficacy increased significantly ( $p=0.03$ ). The  $p$ -value for the Data Collection Staff was  $p<0.001$  with a mean score of 2.7 at baseline and a mean score of 3.5 at post-test, on a 4-point Likert scale. The  $p$ -value for the Child Educator Staff was measured at  $p<0.001$  with a mean score of 3.4 baseline and a mean score of 3.7 on a 4-point Likert scale. These  $p$ -values indicate that the null hypothesis, the SS-TTC will not bring about a positive change in self-efficacy, can be rejected. In other words, these results indicate that self-efficacy increased significantly due to the SS-TTC for each individual training component.

This study had a few limitations. First, the participants all had a nutrition background, which may have skewed the results. Whether they were Ohio State Department of Human Nutrition Dietetic Interns or undergraduate students studying Human Nutrition, the participants were likely to be highly engaged due to a general interest in nutrition. Participants were also likely to have previous knowledge on the questionnaire items assessed. In addition, it is possible that the participants have a higher education level than peer educators, who may be used to implement Simple Suppers in the future. Second, the questionnaire did not assess general nutrition knowledge. It was assumed with these participants that general nutrition knowledge was attained through education, but it is possible that not all participants have the same education and therefore, background general nutrition knowledge. Thirdly, pre-test questionnaires were distributed immediately prior to the training and post-test questionnaires were distributed immediately after each training had ended. This did not indicate whether participants retained and maintained the information from the training, or if the information was fresh in their minds.

Results from this study provide information that may enhance this and other similar nutrition educator training programs. The results from the SS-TTC are supported by other previous studies. In agreement with Brenowitz & Tuttle<sup>2</sup>, our results show that a teacher-training curriculum increases teacher self-efficacy. Our results also support previous focus group information in that in-person group training is beneficial for a training program.<sup>4</sup> In the future the SS-TTC should be modified to include more of an emphasis on the most missed questionnaire items, while maintaining the high scores of the other questionnaire items. In other words, the curriculum should be modified to enhance results in the areas needed, while not taking away from other topics. General nutrition knowledge should also be included in the training curriculum and assessed pre- to post-test. General nutrition knowledge could be analyzed using a

paired t-test to determine if there was a significant change between pre- to post- test. In addition, this training should be attempted in a group with less previous nutrition background and different education levels to compare the results. Results from a more diverse group may indicate other modifications that need to be made to the curriculum. All participants should complete a 30-day follow up questionnaire to measure how much information was retained from the training. Lastly, we plan to interview Simple Suppers staff once the intervention has been implemented to gain feedback on the SS-TTC. This feedback will provide insight into what aspects of the curriculum the staff found beneficial, as well as, areas that may have been lacking. After the few adjustments listed above, SS-TTC can be implemented again to gain more insight on the effectiveness of the teacher-training curriculum and continue enhancing educator training programs.

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## Appendices

# Appendix A.

Parent Educator Training: Baseline  
Component 1. Form 1.

ID \_\_\_\_\_

## Simple Suppers Parent Educator Training Questionnaire

### Section I.

The following questions address your level of confidence in teaching parents of low-income households about family meals related topics. For the following questions, please rank your level of confidence, from 'not at all confident' to 'very confident.'

How confident are you that you can teach parents of low-income households about the following topics:

1. Importance of regular family meals

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

☐
☐
☐
☐

2. Planning family meals on a budget

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

☐
☐
☐
☐

3. Timesaving strategies for family meals

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

☐
☐
☐
☐

4. Ways to involve/connect with a child through family meals

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

☐
☐
☐
☐

5. Planning a balanced meal

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

☐
☐
☐
☐

6. Serving healthy portions

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

☐
☐
☐
☐

7. Eating healthy when eating away-from-home

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

☐
☐
☐
☐

## 8. Planning healthy snacks

*Not at all confident**Somewhat confident**Confident**Very Confident*☐☐☐☐

Parent Educator Training: Post-test  
Component 1. Form 2.

ID \_\_\_\_\_

**Simple Suppers Parent Educator Training Questionnaire**Section I.

The following questions address your level of confidence in teaching parents of low-income households about family meals related topics. For the following questions, please rank your level of confidence, from 'not at all confident' to 'very confident'.

How confident are you that you can teach parents of low-income households about the following topics:

## 1. Importance of regular family meals

*Not at all confident**Somewhat confident**Confident**Very Confident*☐☐☐☐

## 2. Planning family meals on a budget

*Not at all confident**Somewhat confident**Confident**Very Confident*☐☐☐☐

## 3. Timesaving strategies for family meals

*Not at all confident**Somewhat confident**Confident**Very Confident*☐☐☐☐

## 4. Ways to involve/connect with a child through family meals

*Not at all confident**Somewhat confident**Confident**Very Confident*☐☐☐☐

## 5. Planning a balanced meal

*Not at all confident**Somewhat confident**Confident**Very Confident*☐☐☐☐

## 6. Serving healthy portions

*Not at all confident**Somewhat confident**Confident**Very Confident*

☐ ☐ ☐ ☐

7. Eating healthy when eating away-from-home

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

☐ ☐ ☐ ☐

8. Planning healthy snacks

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

☐ ☐ ☐ ☐

Section II.

Section II is an informal quiz that tests your knowledge of the parent Simple Suppers education. For the following questions please check all applicable responses.

9. Which of the following are timesaving strategies for family meals discussed in the SS parent education?

- ☐ Use slow cooker recipes
- ☐ Cook once, eat twice
- ☐ Prep ingredients for family meals ahead of time
- ☐ Involve your child in food preparation
- ☐ Plan ahead

10. Which of the following are child appropriate food preparation skills taught during the parent SS education?

- ☐ Pre-heating the oven
- ☐ Beating eggs with a whisk or eggbeater
- ☐ Sautéing vegetables
- ☐ Using a meat thermometer
- ☐ Cutting raw meat with a knife

11. Which of the following are ways to serve/eat meals that are well-balanced and include healthy portions that are taught during the parent SS education?

- ☐ Include all five food groups
- ☐ Use MyPlate
- ☐ Use common objects as comparisons
- ☐ Use a smaller plate
- ☐ Do not allow second helpings

12. Strategies to eat healthy when eating away-from-home

- ☐ Encourage your child to try new foods when eating-away-from home
- ☐ Let your child select their meal from the menu
- ☐ Try to select meals that include at least 2 food groups
- ☐ Avoid restaurants where unhealthy ordering may be tempting

- ☐ Ask for 'take-home container' when food is served

13. Strategies to plan healthy snacks

- ☐ Create a snack spot
- ☐ Pre-portion snacks
- ☐ Include at least three food groups
- ☐ Buy a snack on the go
- ☐ Use MyPlate

# Appendix B.

Volunteer Training: Baseline  
Component 2. Form 3.

ID \_\_\_\_\_

## Simple Suppers Training: Questionnaire

### Section I.

The following questions address your level of confidence in teaching children (4-10 years old) food preparation/cooking skills, and basic nutrition/food safety knowledge. For the following questions, please rank your level of confidence, from 'not at all confident' to 'very confident.'

How confident are you that you can teach children (4-10 years old) the following topics:

1. Setting the table

*Not at all confident*

☐

*Somewhat confident*

☐

*Confident*

☐

*Very Confident*

☐

2. Importance of washing fruits and vegetables

*Not at all confident*

☐

*Somewhat confident*

☐

*Confident*

☐

*Very Confident*

☐

3. Cutting chicken with scissors

*Not at all confident*

☐

*Somewhat confident*

☐

*Confident*

☐

*Very Confident*

☐

4. Food-safety knowledge related to handling raw meat

*Not at all confident*

☐

*Somewhat confident*

☐

*Confident*

☐

*Very Confident*

☐

5. Knife safety

*Not at all confident*

☐

*Somewhat confident*

☐

*Confident*

☐

*Very Confident*

☐

6. Measuring dry ingredients

*Not at all confident*

☐

*Somewhat confident*

☐

*Confident*

☐

*Very Confident*

☐

7. Beating/whisking an egg

*Not at all confident*

☐

*Somewhat confident*

☐

*Confident*

☐

*Very Confident*

☐

## 8. How to use a meat thermometer

*Not at all confident*☐*Somewhat confident*☐*Confident*☐*Very Confident*☐

Volunteer Training: Post-test  
Component 2. Form 4.

ID \_\_\_\_\_

**Simple Suppers Training: Questionnaire**Section I.

The following questions address your level of confidence in teaching children (4-10 years old) food preparation/cooking skills, and basic nutrition/food safety knowledge. For the following questions, please rank your level of confidence, from 'not at all confident' to 'very confident.'

How confident are you that you can teach children (4-10 years old) the following topics:

## 1. Setting the table

*Not at all confident*☐*Somewhat confident*☐*Confident*☐*Very Confident*☐

## 2. Importance of washing all fruits and vegetables

*Not at all confident*☐*Somewhat confident*☐*Confident*☐*Very Confident*☐

## 3. Cutting chicken with scissors

*Not at all confident*☐*Somewhat confident*☐*Confident*☐*Very Confident*☐

## 4. Food-safety knowledge related to handling raw meat

*Not at all confident*☐*Somewhat confident*☐*Confident*☐*Very Confident*☐

## 5. Knife safety

*Not at all confident*☐*Somewhat confident*☐*Confident*☐*Very Confident*☐

## 6. Measuring dry ingredients

*Not at all confident*☐*Somewhat confident*☐*Confident*☐*Very Confident*☐



7. Beating/ whisking an egg

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

☐
☐
☐
☐

8. How to use a meat thermometer

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

☐
☐
☐
☐

## Section II

The following questions address your level of knowledge regarding food preparation skills and logistics specific to Simple Suppers. For the following questions, please circle the correct answer.

1. How long is the child curriculum?

- a. 15 minutes
- b. 30 minutes
- c. 45 minutes
- d. 60 minutes
- e. 75 minutes

2. During the child curriculum, the children are divided into groups based on \_\_\_\_\_.

- a. Gender
- b. School grade
- c. Age
- d. Family (siblings are paired together)

3. In relation to the parent education, when is the child education taught?

- a. Child education is taught before the parent education
- b. Child education is taught after the parent education
- c. Child education is taught at the same time as the parent education

4. During the child curriculum, every group has \_\_\_\_\_ instructor(s).

- a. one
- b. at least one
- c. two
- d. at least two

5. During the child curriculum, the children do all of the food prep/cooking for every family

meal?

- a. True
- b. False

6. As an undergraduate volunteer, I will have the same role throughout all 10 Simple Suppers lessons?

- a. True
- b. False

7. Which of the following food prep skills are taught in the Simple Suppers child curriculum?  
(check all that apply)

- ☐ Cutting chicken with scissors
- ☐ Beating/whisking an egg
- ☐ Roasting vegetables
- ☐ Grating cheese
- ☐ Using a meat thermometer

# Appendix C.

Data Collection: Baseline  
Component 3. Form 5.

ID \_\_\_\_\_

## Simple Suppers Data Collection Training Questionnaire

### Section I.

The following questions address your level of confidence regarding dietary and anthropometric data collection. For the following questions, please rank your level of confidence, from 'not at all confident' to 'very confident.'

1. How confident are you with assessing an adult's diet using a 24-hour dietary recall?

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

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2. How confident are you with assessing a child's diet using a 24-hour dietary recall?

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

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3. How confident are you with measuring an adult's waist circumference?

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

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☐

4. How confident are you with measuring a child's waist circumference?

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

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5. How confident are you with measuring an adult's blood pressure using an automated device?

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

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6. How confident are you with measuring a child's blood pressure using an automated device?

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

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7. How confident are you with assessing household home food inventory using a home food inventory questionnaire?

*Not at all confident*

*Somewhat confident*

*Confident*

*Very Confident*

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Data Collection: Baseline  
Component 3. Form 5.

ID \_\_\_\_\_

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*Confident*

*Very Confident*

☐☐☐☐

## Section II

The following questions address your level of knowledge regarding data collection specific to Simple Suppers. For the following questions, please circle the correct answer.

8. How many data collection time points are there during baseline data collection (not including families participating in the family meals videotaping sub-study)?

- a. 1
- b. 2
- c. 3
- d. 4
- e. 5

9. In each family, child-level outcomes (dietary intake, food preparation skills, height, weight, blood pressure, waist circumference) will be assessed on:

- a) Oldest child between 4-10 years old
- b) Youngest child between 4-10 years old
- c) Parent-selected child between 4-10 years old
- d) All children in the family between 4-10 years old

10. There are three different child food preparation skills questionnaires. How do you determine which questionnaire to administer?

- a) Child gender
- b) Child age
- c) Child school grade
- d) Child weight status

11. Who completes the child food preparation skills questionnaire?

- a) Parent/guardian
- b) Child

12. Where is the home food inventory checklist completed?

- a) In Campbell Hall (OSU campus)
- b) In the home of the participating family
- c) In the faith-based community center the participating family attends
- d) Over the phone
- e) Both B and C

f) Both B and D

13. When administering the evening meal screener, you must ask the participating parent/guardian to answer questions based on their last:

- a) Away-from-home meal
- b) Away-from-home family meal
- c) Family meal
- d) Home-cooked family meal

## Appendix D.

### **Demographic Questionnaire**

Please answer the following demographic questions

1. How old are you?
  - a. 18-30 years
  - b. 31-40 years
  - c. 41-50 years
  - d. 51 years or older
2. Gender
  - a. Female
  - b. Male
3. What is your highest level of formal education
  - a. Have not completed high school
  - b. Received high school diploma or GED
  - c. Some college or technical school
  - d. 4-year college, university degree or advanced degree
4. Which of the following best describes your employment status?
  - a. Homemaker/househusband
  - b. Not employed
  - c. Employed part-time  
Job Title: \_\_\_\_\_
  - d. Employed full-time  
Job Title: \_\_\_\_\_
  - e. Retired  
Job Title: \_\_\_\_\_
5. Are you a student (either full or part time)?
  - a. Yes
  - b. No

6. How would you like to be contacted for the training follow-up questionnaire?

a. E-mail \_\_\_\_\_

b. Mail \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## Appendix E.

### **The Ohio State University Consent to Participate in Research**

**Study Title:** Simple Suppers: a novel approach to childhood obesity prevention

**Researcher:** Dr. Carolyn Gunther

**Sponsor:** Cardinal Health Foundation; OSU Seed grant

**This is a consent form for research participation.** It contains important information about this study and what to expect if you decide to participate.

**Your participation is voluntary.**

Please consider the information carefully. Feel free to ask questions before making your decision whether or not to participate. If you decide to participate, you will be asked to sign this form and will receive a copy of the form.

**Purpose:**

The purpose of the Simple Suppers (SS) staff training is to equip you with the skills to teach healthy cooking techniques and nutrition knowledge to families with young children.

**Procedures/Tasks:**

Staff training will occur over 1 day for staff or 2 days for lead staff. Before and after each training day, you will be asked to complete a questionnaire. You will also be asked to complete the questionnaire 1 month after staff training. The questionnaire is expected to take less than 10 minutes to complete.

**Duration:**

You may leave the study at any time. If you decide to stop participating in the study, there will be no penalty to you, and you will not lose any benefits to which you are otherwise entitled. Your decision will not affect your future relationship with The Ohio State University.

**Risks and Benefits:**

There are no known risks to this study. The benefits are that you may knowledge on how to effectively teach cooking skills and nutrition knowledge to families with young children.

**Confidentiality:**

Efforts will be made to keep your study-related information confidential. However, there may be circumstances where this information must be released. For example, personal information regarding your participation in this study may be disclosed if required by state law. Also, your records may be reviewed by the following groups (as applicable to the research):

- Office for Human Research Protections or other federal, state, or international regulatory agencies;
- The Ohio State University Institutional Review Board or Office of Responsible Research Practices;
- The sponsor, if any, or agency (including the Food and Drug Administration for FDA-regulated research) supporting the study.

**Incentives:** There is no incentive for participating in this study.

**Participant Rights:**

You may refuse to participate in this study without penalty or loss of benefits to which you are otherwise entitled. If you are a student or employee at Ohio State, your decision will not affect your grades or employment status.

If you choose to participate in the study, you may discontinue participation at any time without penalty or loss of benefits. By signing this form, you do not give up any personal legal rights you may have as a participant in this study.

An Institutional Review Board responsible for human subjects research at The Ohio State University reviewed this research project and found it to be acceptable, according to

applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research.

## Contacts and Questions:

For questions, concerns, or complaints about the study, or you feel you have been harmed as a result of study participation, you may contact Dr. Carolyn Gunther (614) 292-5125 [gunther.22@osu.edu](mailto:gunther.22@osu.edu).

For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.

## Signing the consent form

I have read (or someone has read to me) this form and I am aware that I am being asked to participate in a research study. I have had the opportunity to ask questions and have had them answered to my satisfaction. I voluntarily agree to participate in this study.

I am not giving up any legal rights by signing this form. I will be given a copy of this form.

---

Printed name of subject

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Signature of subject

AM/PM

---

Date and time

---

Printed name of person authorized to consent for subject  
(when applicable)

---

Signature of person authorized to consent for subject  
(when applicable)

AM/PM

---

Relationship to the subject

---

Date and time

### **Investigator/Research Staff**

I have explained the research to the participant or his/her representative before requesting the signature(s) above. There are no blanks in this document. A copy of this form has been given to the participant or his/her representative.

\_\_\_\_\_  
Printed name of person obtaining consent

\_\_\_\_\_  
Signature of person obtaining consent

AM/PM

\_\_\_\_\_  
Date and time